

APPENDIX G

**SUPPORTING INFORMATION
FOR SOCIOECONOMICS**

SOCIOECONOMICS

Inputs and assumptions for the economic model used for the socioeconomic analysis are shown on the following pages.

Environmental Justice (EJ) Information

USEPA responded to EO 12898 by developing the Environmental Justice Strategy that focuses on the agency's efforts in addressing these concerns. The U.S Air Force published additional guidance called The Interim Guide for Environmental Justice Analysis with the Environmental Impact Analysis Process (EIAP) (U.S. Air Force, 1997). This guide contains a general approach for conducting EJ analysis in conjunction with Air Force Instruction (AFI) 32-7061 (EIAP). This is the first step in conducting an EJ assessment for Eglin AFB. Additionally, the United States Environmental Protection Agency (USEPA) Region 4 office has a set of EJ guidelines to follow. This region has a methodology that analyzes demographic data for the affected communities that assists in analyzing the adverse environmental impacts for minority and low-income populations. The definitions that follow were used in this analysis:

Minority population: All people of Hispanic origin, regardless of race, and all Non-Hispanic people who are Black, American Indian, Eskimo or Aleut, Asian or Pacific Islander, or Other race are included in the minority population. The percentage of minority people is calculated as a percentage of the total county population.

Low-income population: Poverty status is used to calculate the low-income population. Poverty status is defined as people living below the poverty level (\$18,100 for a family of four in 2002, adjusted based on household size) as reported in the 2002 Poverty Guidelines, Federal Register, Volume 67, No. 331, February 14, 2002. The percentage of low-income people is calculated as a percentage of all people for whom the Bureau of the Census determines poverty status, which is generally a slightly lower number of people than the total population, based on a sample.

This EO also requires the application of equal consideration for Native American programs. This issue, along with the associated public participation mechanisms, is fully addressed via Eglin's compliance with the following:

- The Antiquities Act of 1906
- The Sites Act of 1935
- The National Historic Preservation Act of 1974
- The Archaeological Resources Protection Act of 1979
- The Native American Graves Protection and Repatriation Act of 1990
- The American Indian Religious Freedom Act

MFH COST MODEL

EGLIN/HURLBURT MFH EIS: PROJECT CHARACTERIZATION

THE TABLE BELOW ILLUSTRATES THE SIZE (IN SQUARE FEET, BY NO. OF BEDROOMS) OF HOUSING UNITS BY GRADE

This File Feeds into "Housing Costs Phasing.xls"

Zip 325

Rank	BR	SF	Cost in \$ 2004
E1-E6	2	1,903	\$ 122,328
E7-E8	2	1,678	\$ 130,967
E1-E6	3	1,630	\$ 129,410
E7-E8	3	1,860	\$ 141,243
E9	3	2,020	\$ 148,480
E1-E6	4	1,950	\$ 145,371
E7-E8	4	2,150	\$ 154,102
E9	4	2,310	\$ 160,899
O6	4	2,541	\$ 179,746
O7+	4	2,541	\$ 179,746

BELOW SHOWS HOW ONE (E1-E6) HOUSE TYPE COSTING IS DERIVED

Rank	E1-E6	
Bedrooms	2	
SF Excluding Garage	1,903	
Class of construction	Average	
Residence Type	1 story	
Configuration	Detached	
Occupancy	One Family	
Exterior construction	Solid Masonry (Average Custom)	
Living Area (Main Bldg)	1,903	
First Level		
Second Level		
Third Level		
Total	1,903	
MAIN BUILDING		
Page	28	
Costs Per \$		
0	\$ 96.95	\$/SF at
0	\$ 93.10	\$/SF at
	Interpolated Cost	
	1,400 SF	Smaller
	1,600 SF	Larger
	1,903 SF	\$ 94.97 \$/SF Living Area
Basement	0	0% % Finished
Roof Cover	0	Type
Central Air	0	Separate Ducts
Heating Sy	0	Type
Subtotal Main Building		\$ 97.77 \$/SF Living Area
x Living Area		1,903 SF
Subtotal Base Cost		\$ 146,944 Subtotal
Additional Bathrooms	0	0 Full
		1 Half
		\$ 4,080 Unit Cost
		\$ 2,583 Unit Cost
Finished Attic	0	0 Square Feet
		Unit Cost
		Additional Cost
Breezeway		Open
		Width (ft)
		Area (sf)
		Closed
		Length (ft)
		Unit Cost \$/sf
		\$ - Additional Cost
Covered Porch		Open
		Width (ft)
		Area (sf)
		Closed
		Length (ft)
		Unit Cost \$/sf
		\$ - Additional Cost
Fireplace	0	Type
		Number
		\$ 3,910
		No. of Flues
		Unit Cost
		\$ - Additional Cost
Appliances		Quality
Range	60	1 30" built in 1 oven
Hood	60	2speed 30"
Dishwr	60	2-cycle
Garbag	60	
Refrige	60	18-20 CF
Washer	60	
Dryer	60	
Garage	60	
		\$ 1,163 Unit Cost
		\$ 456 Unit Cost
		\$ 255 Unit Cost
		\$ 147 Unit Cost
		\$ 835 Unit Cost
		\$ 945 Unit Cost
		\$ 788 Unit Cost
		\$ 385 Unit Cost
		\$ 4,974 Additional Cost

Kitchen Cabinet Adjustment							Additional Cost
Garage	61	2	Number of Cars				
	61 Masonry		Material				
	Average		Quality				
	Attached		Type	\$ 17,957	Unit Cost	\$ 17,957	Additional Cost
Miscellaneous							Additional Cost
ADJUSTED TOTAL BUILDING COST							Adj Cost
Site Improvements							
Driveway	61 Concrete, 6"		Type				
		30	Ft Long				
		20	Ft Wide				
		600	Total SF	3.69	\$/SF	\$ 2,214	Additional Cost
Paths	61 Concrete, 4"		Type				
		60	Ft Long				
		3	Ft Wide				
		180	Total SF	\$ 2.71	\$/SF	\$ 488	Additional Cost
Rear Pati	61 Concrete, 4"		Type				
		15	Ft Long				
		30	Ft Wide				
		450	Total SF	\$ 2.71	\$/SF	\$ 1,220	Additional Cost
Landscaping							
Fine	61	14,520	Lot Size, SF				
		2,733	Less Building, Driveways and Paving				
		11,787	SF Lawn	\$ 1.88	\$/SY	\$ 2,462	Additional Cost
Sprin	61			\$ 0.72	\$/SF	\$ -	Additional Cost
Fences	61		Type				Additional Cost
			Length		\$/SF		Additional Cost
Swimmin	61						Additional Cost
Miscellar	61						Additional Cost
Subtotal Site Improvements							
TOTAL BUILDING COST INCLUDING SITE IMPROVEMENTS						\$ 178,842	
Location F:	449	Zip 325	Pensacola			0.76	
LOCAL BUILDING COST						\$ 135,920	
Reduction	12	2004 National Building Cost Manual		10.0%	Percent	\$ 13,592	
Cost in 2004 Dollars						\$ 122,328	

Rank	O7+	
Bedrooms	4	
SF Excluding Garage		2,541
Class of construction	Average	
Residence Type	1 story	
Configuration	Detached	
Occupancy	One Family	
Exterior construction	Solid Masonry (Average Custom)	

Living Area (Main Bldg)	
First Level	2,541
Second Level	
Third Level	
Total	2,541

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Costs Per (

Costs Per Sq		28							
	0	\$	83.30	\$/SF at	2,400	SF	Smaller		
	0	\$	79.50	\$/SF at	2,800	SF	Larger		
				Interpolated Cost	2,541	SF		\$	81.96 \$/SF Living Area
Basement.	0		0%	% Finished		0%	%Unfinished		\$/SF Living Area
Roof Cover	0			Type					\$/SF Living Area
Central Air	0			Separate Ducts	X	Heating Ducts		\$	2.80 \$/SF Living Area
Heating Sy	0			Type					\$/SF Living Area
Subtotal Main Building								\$	84.76 \$/SF Living Area
x Living Area									2,541 SF
Subtotal Base Cost								\$	215,376 Subtotal
Additional Bathrooms	0		1	Full	\$	4,080	Unit Cost	\$	4,080 Additional Cost
			1	Half	\$	2,583	Unit Cost	\$	2,583 Additional Cost
Finished Attic	0		0	Square Feet			Unit Cost		Additional Cost
Breezeway				Open			Closed		
	0		-	Width (ft)			Length (ft)		
				Area (sf)			Unit Cost\$/sf	\$	- Additional Cost
Covered Porch				Open			Closed		
	0		200	Width (ft)	x	10	Length (ft)		
				Area (sf)			Unit Cost\$/sf	\$	- Additional Cost
Fireplace	0		1	Type			No. of Flues		
				Number	\$	3,910	Unit Cost	\$	3,910.00 Additional Cost
Appliances							Quality		
Range	60		1	30" built in 1 oven	\$	1,163	Unit Cost	Average	
Hood	60			2speed 30"	\$	498	Unit Cost	0	
Dishwa	60			2-cycle	\$	255	Unit Cost	0	
Garbag	60				\$	147	Unit Cost	0	
Refrige	60			18-20 CF	\$	835	Unit Cost	0	
Washir	60				\$	945	Unit Cost	0	
Dryer	60				\$	788	Unit Cost	0	
Garage	60				\$	385	Unit Cost	0	
								\$	4,974 Additional Cost

Kitchen Cabinet Adjustment								Additional Cost
Garage	61	2	Number of Cars					
	61 Masonry		Material					
	Average		Quality					
	Attached		Type					
					\$ 17,957	Unit Cost	\$ 17,957	Additional Cost
Miscellaneous								Additional Cost
ADJUSTED TOTAL BUILDING COST								Adj Cost
Site Improvements								
Driveway	61 Concrete, 6"		Type					
		30	Ft Long					
		20	Ft Wide					
		600	Total SF		3.69	\$/SF	\$ 2,214	Additional Cost
Paths	61 Concrete, 4"		Type					
		60	Ft Long					
		3	Ft Wide					
		180	Total SF		\$ 2.71	\$/SF	\$ 488	Additional Cost
Rear Pati	61 Concrete, 4"		Type					
		15	Ft Long					
		30	Ft Wide					
		450	Total SF		\$ 2.71	\$/SF	\$ 1,220	Additional Cost
Landscaping								
Fine	61	14,520	Lot Size, SF					
		3,771	Less Building, Driveways and Paving					
		10,749	SF Lawn		\$ 1.88	\$/SY	\$ 2,245	Additional Cost
Sprin	61	10,749			\$ 0.72	\$/SF	\$ 7,739.28	Additional Cost
Fences	61		Type					
			Length			\$/SF		Additional Cost
Swimmin	61							Additional Cost
Miscellar	61							Additional Cost
Subtotal Site Improvements								
TOTAL BUILDING COST INCLUDING SITE IMPROVEMENTS							\$ 262,786	
Location F:	449 Zip 325 Pensacola						0.76	
LOCAL BUILDING COST							\$ 199,718	
Reduction:	12 2004 National Building Cost Manual				10.0%	Percent	\$ 19,972	
Cost in 2004 Dollars							\$ 179,746	

Appendix G

Supporting Information for Socioeconomics

CONSTRUCTION SCHEDULE USED IN COST MODELING

Timeline Schedule - Construction

Index	Rank		2015		0	2015	2015
			SF	Bedrooms	Existing	Const	ConstChk Cost
1 Eglin	E1-E6		1,803	2		682	682 \$ 122,328
2 Eglin	E7-E8	O1-O3	1,678	2		76	76 \$ 130,967
3 Eglin	E1-E6		1,630	3		222	222 \$ 129,410
4 Eglin	E7-E8	O1-O3	1,680	3		77	77 \$ 141,243
5 Eglin	E9	O4-O5	2,020	3		45	45 \$ 148,490
6 Eglin	E1-E6		1,990	4		248	248 \$ 145,371
7 Eglin	E7-E8	O1-O3	2,190	4		98	98 \$ 154,102
8 Eglin	E9	O4-O5	2,310	4		38	38 \$ 160,899
9 Eglin		O6	2,541	4		16	16 \$ 179,746
10 Eglin		O7+	2,541	4		2	2 \$ 179,746
13 Hurlburt	E1-E6		1,803	2		312	312 \$ 122,328
14 Hurlburt	E7-E8	O1-O3	1,678	2		40	40 \$ 130,967
16 Hurlburt	E7-E8	O1-O3	1,680	3		70	70 \$ 141,243
17 Hurlburt	E9	O4-O5	2,020	3		32	32 \$ 148,490
18 Hurlburt	E1-E6		1,990	4		16	16 \$ 145,371
19 Hurlburt	E7-E8	O1-O3	2,190	4		22	22 \$ 154,102
20 Hurlburt	E9	O4-O5	2,310	4		10	10 \$ 160,899
21 Hurlburt		O6	2,541	4		6	6 \$ 179,746
22 Hurlburt		O7+	2,541	4		3	3 \$ 179,746

EXAMPLE OF HOW ROADS AND SIDEWALKS ARE COSTED

Roads and Sidewalks

Non-GOQ / SOQ neighborhood

Average Units Per Acre

3

Average lot size

0.3333 Acre

14,520 sf

Assumed Lot Dimension

Road Frontage

100 ft

arbitrary

Lot depth

145 ft

GOQ / SOQ neighborhood

Average Units Per Acre

2

Average lot size

0.5000 Acre

21,780 sf

Assumed Lot Dimension

Road Frontage

125 ft

arbitrary

Lot depth

174 ft

Roadways

Non-GOQ / SOQ units

1,999 Units

arbitrary

GOQ / SOQ units

16

Total Units

2,015

Length of Roadways

Assume homes on 2 sides of street

Plus additional factor of

25%

Non-GOQ / SOQ Roads

124,938 ft

GOQ / SOQ Roads

1,290 ft

126,188 ft

23.90 miles

Width of Roads

20 ft

Cost of Paved Area

\$

88.50 \$/ LF

4" 20' wide bituminous
RS Means , SF book, 2004, p. 441

Cost of Paved Area

\$

11,167,594

Curb and Gutter

22.96 LF Roadway

Both Sides; p 381 2004 National

Total Curb and Gutter

\$

2,897,265

Total Cost of Roadway

\$

14,064,859

Sidewalks, assume both sides

Length

252,375 ft

Width

5 ft

1,261,875 sf

Cost of Sidewalks

\$

2.71 \$/ SF

4" Thick
RS Means , SF Book, 2004, p. 61

334	200	210	213	210	282	285	0	281	0	\$41,806,481	\$24,465,538	\$26,080,557	\$26,754,882	\$29,029,129	\$39,081,996	\$36,618,354	\$-	\$43,306,402	\$-	\$267,143,339
2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
200	200	201	81							\$24,465,538	\$24,465,538	\$24,587,865	\$9,908,543	\$-	\$-	\$-	\$-	\$-	\$-	\$83,427,484
134			76							\$-	\$-	\$-	\$9,953,495	\$-	\$-	\$-	\$-	\$-	\$-	\$9,953,495
			6							\$17,340,943	\$-	\$-	\$776,460	\$10,611,622	\$-	\$-	\$-	\$-	\$-	\$28,729,026
				82						\$-	\$-	\$-	\$-	\$10,875,689	\$-	\$-	\$-	\$-	\$-	\$10,875,689
		4		77						\$-	\$-	\$93,962	\$-	\$6,088,109	\$-	\$-	\$-	\$-	\$-	\$6,682,071
				41	199	39				\$-	\$-	\$-	\$-	\$1,453,708	\$28,928,798	\$5,689,463	\$-	\$-	\$-	\$36,051,970
				10						\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-
								98		\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$15,101,990	\$-	\$15,101,990
								38		\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$6,102,756	\$-	\$6,102,756
								13		\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$2,336,686	\$-	\$2,875,934
		3								\$-	\$-	\$539,238	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$399,492
		2								\$-	\$-	\$399,492	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$399,492
			90		83	179				\$-	\$-	\$-	\$6,116,384	\$-	\$10,153,198	\$21,896,696	\$-	\$-	\$-	\$38,166,239
						40				\$-	\$-	\$-	\$-	\$-	\$-	\$5,238,682	\$-	\$-	\$-	\$5,238,682
						27				\$-	\$-	\$-	\$-	\$-	\$-	\$3,813,553	\$-	\$6,073,437	\$-	\$9,886,990
								43		\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$4,751,695	\$-	\$4,751,695
								32		\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-
								16		\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$2,325,934	\$-	\$2,325,934
								22		\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$3,390,234	\$-	\$3,390,234
								10		\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$1,605,988	\$-	\$1,605,988
								6		\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$1,078,475	\$-	\$1,078,475
								3		\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$539,238	\$-	\$539,238

1 References:

- 2
- 3 U.S. Air Force, 1997. *Interim Guide for Environmental Justice Analysis with the Environmental Impact Analysis*
- 4 *Process (EIAP)*. Department of the Air Force, November 1997.
- 5 Federal Register, 2002. 2002 Poverty Guidelines. Federal Register, Volume 67, No. 331, February 14, 2002.